

# **FRACTURE BAN®**

DS-155-0624

# Globally Proven Construction Solutions



# 1. PRODUCT NAME FRACTURE BAN<sup>®</sup>

# 2. MANUFACTURER

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# **3. PRODUCT DESCRIPTION**

A high performance, pliable, light weight peel and stick membrane designed for use under thin-bed adhesives for ceramic tile, stone and other hard surface installations. This reinforced high strength membrane performs as an anti-fracture and an acoustical underlayment system that eliminates the transmission of stresses from the substrate while dampening the transmission of impact and air borne noise through the floor to the room below. The unique design of this peel and stick membrane allows for usage in both commercial and residential settings where a quick dependable turnaround is required.

#### Uses

- Residential and commercial
- Retail, malls and stores
- Offices, hotel/motel, hospitals
- Apartment and condo buildings

#### **Advantages**

- Provides anti-fracture/sound reduction in one convenient easy to install product
- For installation requiring a quick dependable turnaround
- Hot-applied polymer modified asphaltic adhesive coated on a 100% polyester non-woven with a 60# release liner paper
- Has a white non-woven surface for easy chalk line identification
- · Provides a water resistive barrier
- Prevents in plane cracks up to 3/8" (9.5 mm)

## Suitable Substrates

- Cement Mortar Bed
- Exterior Glue Plywood (Interior Only)
- Oriented Strand Board (OSB)
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- Precast Floor Panels
- Gypsum Underlayments
- Radiant Heated Floors
- Ceramic Tile
- Terrazzo
- Stone
- Self-Leveling and Patching Compounds
- Backer Board
- Existing VAT
- VCT and Vinyl Floors
- Concrete

# Packaging

One roll of FRACTURE BAN 40 is 40 mils (1 mm) thick 39.25 in. x 69 ft (1 m x 21 m) or 225 ft<sup>2</sup> (21 m<sup>2</sup>). 24 rolls per pallet.

One roll of FRACTURE BAN 90 is 90 mils thick (2.3 mm) 39.25 in. x 30.6 ft (1 m x 9.33 m) or 100 ft<sup>2</sup> ( $9.3 \text{ m}^2$ ). 24 rolls per pallet.

# Approximate Coverage

- One roll of FRACTURE BAN 40 covers 225 ft<sup>2</sup> (20.9 m<sup>2</sup>)
- One roll of FRACTURE BAN 90 covers 100 ft<sup>2</sup> (9.3 m<sup>2</sup>)

FRACTURE BAN Primer & /or Primer Plus is a concentrate and must be diluted with clean potable

Data Sheets are subject to change without notice. For latest revision, visit <u>laticrete.com</u>. DS-155-0624

water at a 1:1 (primer:water) ratio. Mix/stir concentrate thoroughly prior to and after diluting.

# Shelf Life

Factory sealed containers of this product are guaranteed to be of first quality for one (1) year if stored at temperatures >32°F (0°C) and <110°F (43°C).

# Limitations

- FRACTURE BAN™ is not intended for use as a waterproofing membrane. When a waterproofing membrane is required, use a LATICRETE<sup>®</sup> Waterproofing Membrane (see Section 10 FILING SYSTEMS).
- FRACTURE BAN can only be used in wet areas with NXT<sup>®</sup> Epoxy Primer
- · Do not install moisture-sensitive tile or stone with water based setting materials on top of FRACTURE BAN peel & stick membranes. Also, dimensionally weak natural stone tile that normally would not be categorized as moisture sensitive: such as travertine. limestone, marble and agglomerates can exhibit doming, cupping or curing when wet-set using medium-bed mortar methods of installation over impervious sheet membranes such as FRACTURE BAN. For this reason, areas requiring more than 3/8" (10 mm) buildup require the use of a NXT<sup>™</sup> selfleveling underlayment's or cured 3701 Fortified Mortar application before installation of FRACTURE BAN. When installing natural stone, always do a mockup area of the proposed installation and allow materials to reach full cure to ensure achieving the desired effect.
- Not recommended for use on concrete floors where hydrostatic head pressure exists or moisture vapor transmission in excess of 5 lbs. per 1000 ft<sup>2</sup> per 24hrs (283?g/s• m<sup>2</sup>) as determined by calcium chloride kit test ASTM F1869 is present or 75% RH when tested per ASTM F2170. If the moisture vapor transmission is greater than 5 lbs. per 1000 ft<sup>2</sup> per 24hrs (283?g/s• m<sup>2</sup>) then first coat the concrete floor using NXT Vapor Reduction Coating according to Data Sheet DS 507.0 then proceed with the FRACTURE BAN Primer or Primer Plus and FRACTURE BAN membrane application.
- Not recommended for use where horizontal floor movement is greater than 1/4" (6.4 mm). Existing cracks larger than 3/16" (4.8 mm) should be prepared with proper backing material prior to installation of membrane
- Not recommended to cover joints or cracks larger than 3/8" (9.5 mm)
- Not recommended for use where vertical floor movement is present
- For installations over plywood subfloors, please refer to TCNA Method F125A. For expansion joints, reference TCNA Method EJ171

- Must be covered with ceramic tile, stone, or other hard finish. Use protection board for temporary cover prior to finishing horizontal surfaces.
- Do not use solvent based sealants or sealers where contact with membrane may occur
- Do not install when surface temperature is below 40°F (4°C), when ambient temperature is expected to be below 50°F (10°C) during placement or before material takes final set or when temperature will be above 90°F (32°C).
- Do not allow FRACTURE BAN Primer or Primer Plus to freeze.
- Do not install FRACTURE BAN, FRACTURE BAN Primer or Primer Plus over particleboard, chipboard, hardboard (Masonite), Luan panels, asbestos, interior glue plywood, gypsum-based patching materials, asphalt, coal tar, or lightweight insulating concrete or any other dimensionally unstable materials.
- If FRACTURE BAN is going to be used on an exterior application, FRACTURE BAN Primer or Primer Plus must be replaced with NXT<sup>®</sup> Vapor Reduction Coating and used along with FRACTURE BAN 40 only. Apply the NXT<sup>®</sup> Vapor Reduction Coating according to DS 507 and then install the FRACTURE BAN 40 directly to the surface primed with the NXT<sup>®</sup> Vapor Reduction Coating.
- If FRACTURE BAN is going to be used on an exterior application, FRACTURE BAN Primer must be replaced with VAPOR BAN™ Primer ER and used along with FRACTURE BAN 40 only. Apply the VAPOR BAN™ Primer ER according to DS 35222 and then install the FRACTURE BAN 40 directly to the surface primed with the VAPOR BAN™ Primer ER.
- Note: Surfaces must be structurally sound, stable and rigid enough to support ceramic/stone tile, thin brick and similar finishes. Substrate deflection under all live, dead and impact loads, including concentrated loads, must not exceed L/360 for thin bed ceramic tile/brick installations or L/480 for thin bed stone installations where L=span length.

# Cautions

- Consult SDS for safety information.
- During cold weather, protect finished work from traffic until fully cured.
- Read and understand the Product Data Sheet and Safety Data Sheet.
- Perform a mock-up to ensure product will perform as required.
- Check www.laticrete.com for any technical bulletins or updated information about the product and its application.
- FRACTURE BAN Primer &/or Primer Plus can cause serious eye irritation. In case of eye contact, wash immediately with water.
- Wear gloves and protective goggles.
- When spraying FRACTURE BAN Primer &/or Primer Plus avoid breathing the fine mist and use a NIOSH approved respirator.

- Contact LATICRETE Technical Services for more information or to answer questions regarding installation.
- Not for submerged applications.
- Keep FRACTURE BAN Primer &/or Primer Plus out of reach of children.
- When treating cracks in a concrete floor or going over saw cut joints install the FRACTURE BAN must be applied a minimum of 3 times the width of the tile being installed. The tile installed over the crack cannot be in contact with the concrete. Follow TCNA Method F125 for the treatment of hairline cracks, shrinkage cracks, and saw cut or control joints. A LATICRETE polymer fortified thin-set should be used to feather the edge of the membrane at least 12" (305 mm) from the edge in order to eliminate any abrupt changes in surface height.

# 4. TECHNICAL DATA

#### **Applicable Standard**

• ANSI A118.12, ANSI A118.13, ASTM C627, ASTM E2179, ASTM E492, ASTM E90

#### **Physical Properties**

Standar d	Descripti on	Requireme nt	Test F	Result
			40 mil	90 mil
ASTM C627	Robinson Floor Test	Cycles 1 - 14	Extra Heav y	Heav y
ASTM E2179	IIC Rating	Calculate	42	45
ASTM E2179	ΔIIC	>10	14	17
ASTM E90	Airborne Sound	Calculate	54	57

Specifications subject to change without notification. Results shown are typical but reflect test procedures used. Actual field performance will depend on installation methods and site conditions.

#### **5. INSTALLATION**

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#### **Surface Preparation**

All substrates must be structurally sound, clean and free of dirt, oil, grease, paint, laitance, efflorescence, concrete sealers or curing compounds. Make rough or uneven concrete smooth to a wood float or better finish with a underlayment. Do not level with asphalt based products. Maximum deviation in plane must not exceed 1/4" in 10 ft (6 mm in 3 m) with no more than 1/16" in 1 ft (1.5 mm in 0.3 m) variation between high spots. Refer to Technical Data Sheet 152 "Bonding Ceramic Tile, Stone or Brick Over Wood Floors" (refer to section 10, FILING SYSTEMS).

#### For concrete floor construction:

To remove any bond-inhibiting materials, clean the surface by mechanically grinding to obtain an International Concrete Repair Institute (ICRI) concrete surface profile (CSP) #2. If the concrete requires further grinding to clean the surface causing a higher CSP, smooth the surface using a slurry bond coat of 254 Platinum or a NXT<sup>TM</sup> patching or self leveling underlayment.

## For wood floor construction:

1. Installer must verify that deflection under all live, dead and impact loads of interior plywood floors does not exceed industry standards of L/360 for ceramic tile and brick or L/480 for stone installations where L=span length.

2. Minimum construction for interior plywood floors.

**SUBFLOOR:** 5/8" (15 mm) thick exterior glue plywood, either plain with all sheet edges blocked or tongue and groove, over bridged joists spaced 16" (400 mm) o.c. maximum; fasten plywood 6" (150 mm) o.c. along sheet ends and 8" (200 mm) o.c. along intermediate supports with 8d ring-shank, coated or hot dip galvanized nails (or screws); allow 1/8" (3 mm) between sheet ends and 1/4" (6 mm) between sheets edges; all sheet ends must be supported by a framing member; glue sheets to joists with construction adhesive.

**UNDERLAYMENT:** 5/8" (15 mm) thick exterior glue plywood fastened 6" (150 mm) o.c. along sheet ends and 8" (200 mm) o.c. in the panel field (both directions) with 8d ring-shank, coated or hot dip galvanized nails (or screws); allow 1/8" (3 mm) to 1/4" (6 mm) between sheets and 1/4" (6 mm) between sheet edges and any abutting surfaces; offset underlayment joists from joints in subfloor and stagger joints between sheet ends; glue underlayment to subfloor with construction adhesive. Refer to Technical Data Sheet 152 "Requirements for Direct Bonding of Ceramic or Stone Tiles Over Wood Floors" for complete details.

#### Application

- 1. Install FRACTURE BAN™ to a clean properly prepared and primed floor as described in the FRACTURE BAN Primer or Primer Plus Data Sheet.
- 2. Measure the area and cut membrane length 6" to 8" (152-203 mm) longer than needed to allow for a trimmed fit.
- 3. Lay the pre-cut membrane directly on subfloor with release liner side down.
- 4. Pull release paper off membrane while handsmoothing ridges and air pockets to ensure a good bond with 100% contact with subfloor. Once release paper is pulled from membrane an immediate bond will form. It may be extremely difficult to pull membrane from floor once bonded.
- 5. Trim excess material as needed at walls, corners or termination areas.
- 6. Apply the next roll in the same fashion as the first roll insuring that the each roll butts up to the previous roll without any gaps.
- 7. Do not overlap the edges in order to provide a flat surface for subsequent wear surface installation.
- 8. To ensure a good bond between the FRACTURE BAN and the primed floor, roll the surface with a 75-100 lb. (34-45 kg) floor roller after each section of FRACTURE BAN is installed.
- 9. Install tile using the appropriate LATICRETE® polymer fortified thin-set.

## Perimeter Isolation Strip

When using FRACTURE BAN as an acoustical underlayment it is essential that all walls and building elements are isolated from the floor. The use of acoustical ceiling panels in the space below would provide additional sound control.

#### Exterior Applications

When applying the NXT<sup>®</sup> Vapor Reduction Coating according to DS-507 and then install the FRACTURE BAN 40 directly to the surface primed with the NXT<sup>®</sup> Vapor Reduction Coating. When applying the VAPOR BAN<sup>™</sup> Primer ER according to DS-35222 and then install the FRACTURE BAN 40 directly to the surface primed with the VAPOR BAN™ Primer ER. Note: It is recommended to install a perimeter isolation strip before placing and trimming FRACTURE BAN Membrane. Attach the perimeter isolation strip to the perimeter wall of the entire subfloor, as well as around the perimeter of any protrusions, in order to isolate or break the vibration transmission path between the floor and the wall. Temporarily fasten perimeter isolation strip in place with masking, duct, or carpet tape. The perimeter isolation strip can then be removed after the tiles have set firm. The joints can then be filled with an appropriate acoustical sealant.

All surfaces must be primed prior to the installation of FRACTURE BAN. FRACTURE BAN Primer or Primer Plus is a concentrate and must be diluted with clean potable water prior to application. Always stir or shake FRACTURE BAN Primer concentrate prior to diluting. Water must always be carefully measured in order to ensure proper dilution is achieved. Use a mixing paddle to thoroughly combine primer and water. FRACTURE BAN Primer can be broom, roller, mop, or spray applied. Substrate temperature must be a minimum 40°F (4°C) during primer application and throughout drying time. Additionally, air temperature must be maintained between 50–90°F (10–32°C) during primer application and throughout drying time. The primed surface must also be protected from weather, water and direct sunlight.

# 6. AVAILABILITY AND COST

#### Availability

LATICRETE materials are available worldwide.

## For Distributor Information, Call:

Toll Free: 1.800.243.4788 Telephone: +1.203.393.0010 For on-line distributor information, visit LATICRETE at laticrete.com

#### Cost

Contact a LATICRETE Distributor in your area.

# 7. WARRANTY

See 10. FILING SYSTEM:

- 25 Year System Warranty (US) (English)
- 5 Year System Warranty (US) (English)
- 10 Year System Warranty (US) (English)
- 1 Year Product Warranty (US) (English)

# 8. MAINTENANCE

Non-finish LATICRETE and LATAPOXY installation materials require no maintenance but installation performance and durability may depend on properly maintaining products supplied by other manufacturers.

# 9. TECHNICAL SERVICES

## Technical Assistance

Information is available by calling the LATICRETE Technical Service Hotline:

Toll Free:	1.800.243.4788, ext. 1235
Telephone:	+1.203.393.0010, ext. 1235
Fax:	+1.203.393.1948

## **Technical and Safety Literature**

To acquire technical and safety literature, please visit our website at <u>laticrete.com</u>.

# **10. FILING SYSTEM**

Additional product information is available on our website at <u>laticrete.com</u>. The following is a list of related documents:

- DS 230.13: LATICRETE® Product Warranty
- DS 025.00: LATICRETE 25 Year System Warranty
- DS 230.10: LATICRETE 10 Year System Warranty
- DS 230.05: LATICRETE 5 Year System Warranty
- TDS 152: Bonding Ceramic Tile, Stone or Brick Over Wood Floors
- DS 156.0: FRACTURE BAN™ Primer
- DS 663.0: HYDRO BAN®
- DS 236.0: 9235 Waterproofing Membrane
- DS 155.0: 3701 Fortified Mortar
- DS 029.3: NXT® Epoxy Primer